

## TANOAK: HISTORY, ECOLOGY AND VALUES

### FOREWORD

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To combat sudden oak death (SOD), scientists needed to understand its primary host – tanoak, *Notholithocarpus densiflorus* (Hook. & Arn.) Manos, Cannon & S. H. Oh (Fagaceae), so research was initiated on its distribution, utilization and natural history. This *Madroño* Special Issue presents much of what we have learned, over the past 10 years, about this endemic, broadleaf tree, common throughout coastal California and southwest Oregon. By assembling this work, we aim to synthesize new information about this important SOD host; apply the concepts and findings to conservation and management; and share our appreciation for tanoak.

The articles in this issue, on tanoak ecology, population genetics, and associated organisms, can only begin to hint at the significance of this California native tree. Lamentably, tanoaks' character has become more apparent from viewing its demise. Since the mid-1990s, millions of tanoak trees have been lost to the exotic pathogen, *Phytophthora ramorum*, the causative agent of SOD. The cliché, "You don't know what you have until it's gone" has played out in backyards, parks, forests, wilderness areas, and along roadsides from Monterey County northward into Curry County, Oregon. Where tanoak once resided, we have come to more fully appreciate the "sovereign oak", for lost along with the groves are beauty, ambience, habitat,

food, soil stability, screening and other less tangible values.

Society has had profound impacts on the tanoak ecology, and its current status reveals much about human culture and relationship to nature. Over the past century tanoak has been adored and despised: prized for its acorns; debarked for tannins; treated with herbicides to reduce competition for commercial conifers; and coveted as part of the urban forest. Tanoaks are tenacious and vulnerable: they sprout vigorously, but are very susceptible to SOD. Conservation of the tanoak resource is a challenge that requires consideration of botany, ecology, forestry and the conflicting values of diverse populations, all of which are confounded by an emerging exotic pathogen. We invite your collaboration in our aspiration to care for tanoak.

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